

**XIX.**—*Note on (i) Elachistodon Westermanni, (ii) Platyceps semifasciatus, and (iii) Ablepharus pusillus and Blepharosteres agilis.*—*By W. T. BLANFORD, F. R. S.*

(Received Nov. 9;—Read Dec. 1, 1875.)

§ I.—A young snake was recently presented to the Indian Museum by Mr. G. Shillingford, of Purneah, and Mr. Wood-Mason, the Curator, asked me to determine it. For a long time I was unsuccessful, for the specimen presents the peculiarity of a pit behind the nostril, scales much like those of a *Bungarus*, except that the subcaudals are divided, and no poison fang; but after a good deal of research I at last identified the specimen with *Elachistodon Westermanni*, Reinhardt, *Oversigt K. Dansk. Vid. Selsk. Forh. Kjobenhavn*, 1863, p. 210 (Gunther, *Rept. Brit. Ind.*, Appendix).

This snake is admirably figured in the original paper, and a remarkable character not mentioned in Dr. Gunther's description is shewn in the figure. This character consists in the presence of a post-nasal pit.

A loreal pit has been found in two other genera of harmless snakes, both West African; one *Bothrolycus* belonging to the *Lycodontidæ*, (Günther, *P. Z. S.*, 1874, p. 444, Pl. LVII, fig. B), the other *Bothrophthalmus* belonging to the *Colubridæ*. In *Elachistodon* the loreal shield is united to the nasal above and a suture runs from the edge of the pit to the labials below. In the original description the nasal was said to lie between two shields and the loreal was considered to enter the orbit, but there is certainly no suture above the nostril in the Purneah specimen and, considering the presence of the pit, I think that the lower praœocular is not the loreal and that the homologies of the shields are as I have suggested.

From the character of the scales I am inclined to refer *Elachistodon* to the *Dipsadidae*, and the dentition as described by Reinhardt agrees with this view, the posterior maxillary teeth being grooved. The following is a description of the specimen obtained.

Head scarcely broader than the neck, flat above, body somewhat compressed, tail rather short, pupil vertical, body surrounded by 15 rows of smooth scales, those on the sides as broad as long, the dorsal row enlarged, hexagonal, much broader than long. Nostrils lateral, each in a single shield, which contains a deep pit behind the nostril, the shield is divided below the pit, the suture running forwards to below the nostril and then downwards. Both palatine and maxillary teeth are present, but the specimen is too small for their characters to be made out. Ventrals 210, subcaudals in 65 pairs, anal undivided. Length  $8\frac{3}{4}$  inches, of which the tail is 1.4.

Head-shields normal except that there is no separate loreal, this being united with the nasal above. Rostral twice as broad as high, just reaching the upper surface of the head. Anterior and posterior frontals equal in

length, the latter are broader and descend somewhat on to the side of the head so that the upper præocular is not in contact with the nasal. Vertical hexagonal, rather longer than broad, occipitals large, rather broad in front, 2 præoculars, the lower the larger, the higher not reaching the upper surface of the head; 2 postoculars. Upper labials 6 on one side of the head, 7 on the other, the 3rd and 4th entering the orbit, the last very large. Temporals 2, very long, the upper extending the whole length of the occipital, the lower rather shorter. Three pairs of enlarged chin-shields, the posterior separated by a small azygos scale, the second pair the largest, each being in contact with 3 lower labials. All the lower labials very narrow. *Colouration* :—a narrow white line runs along the back, it is straight on the tail, becomes wavy in the middle of the back, and tends to break up into spots near the head; sides dark brown with numerous minute elongate white spots tending to form cross bands; lower parts white, each ventral shield with a dark hinder edge, which frequently expands into irregular spots near the sides; upper surface of head blackish brown, suture between the occipital shields white, rostral and a broad line running from it over the outer part of the frontals and supraorbitals and across the temporals to the hindmost labial, and all the labials themselves, white, whilst a blackish brown band runs from the nostril to the temporals below the white line, and includes the eye.

§ II.—I had occasion recently to examine the type specimen of *Platyceps semifasciatus*, Blyth. It is a very young snake and has hitherto been a puzzle to Indian herpetologists, as may be inferred from the following synonymy :

*Platyceps semifasciatus*, Blyth, J. A. S. B., 1861, XXIX, p. 114; Günther, Rept. Brit. Ind. p. 237.

*Coluber (Platyceps) semifasciatus*, Theobald, Cat. Rept. in appendix to J. A. S. B., 1868, XXXVII, p. 52.

*Compsosoma semifasciatum*, Stoliczka, J. A. S. B., 1870, XXXIX, p. 188.

I venture with some diffidence to suggest that it is a young specimen of *Zamenis ventrimaculatus*, a snake with which I am very well acquainted from having found it abundantly in Persia, but which is not common in India except in the extreme west, and is necessarily not easily recognised in the young state except by one who knows its appearance well.

§ III.—On comparison of the scinque from Basrah which I described\* as *Ablepharus pusillus* (A. and M. N. H. July, 1874, XIV, p. 33) with the type specimen in the Indian Museum of the species described by Dr. Stoliczka as *Blepharosteres a. gilis*, I am disposed to believe that I was wrong in supposing them, on the strength of the descriptions, to be identical. They

\* In this description a serious misprint occurs. The number of scales between the axils should be 36 not 26.

are congeneric without doubt, and *Blepharosteres agilis* is an *Ablepharus*, but it differs from *A. pusillus* in its much longer body. In *A. agilis* the fore limb does not nearly reach half way to the thigh and the hind limb barely reaches half way to the axil. In *A. pusillus* the fore limb reaches fully half way to the thigh or rather more and the hind limb two-thirds of the way to the axil. In the former the third and fourth toes of the fore foot are about equal in length, in the latter the third finger is decidedly the shorter. Under these circumstances I think it probable that *A. pusillus*\* is a distinct species and that *A. agilis* is probably distinct from *A. Brandti*, Strauch.



## XX.—*The Evidence of past Glacial Action in the Nágá Hills, Assam.*

By Major H. H. GODWIN-AUSTEN, F. R. G. S., F. Z. S.

(Received July 25;—Read August 4, 1875.)

With Plates X—XIII.

When carrying on the survey operations in the Khási Hills, I was more than once led to think that glacial action had played a part in the denudation of some of the valleys; but the traces of such action were so slight that I hesitated to notice them. However, when writing the paper on the West Khási Hills which was published in this Journal in 1869, I alluded to the subject, with reference to the valley near Mokarsa, under the Maotherichan ridge. When mapping the Jatinga valley, I met with lines of heavy subangular débris, skirting streams from the north side of the high ridge the west extremity of the Burrail running thence to Asálu. Under and to north of the peak of Mahadeo, there is a terminal mass of transported material near where the Naga village of Garilo formerly stood. On the north of the Shillong peak, the highest part of the Khási Hills, skirting the sides of the “Umshirpi” stream, are to be seen the remnants of deposits for which it is difficult to account, unless we bring in the agency of ice, or large melting snow-beds. The “Umshirpi” has cut a deep gorge through the altered sandstones below the point where the road from Cherra Poonjee crosses it, and here takes a very sharp bend; since its original excavation, a bed of water-worn boulders has filled the valley, and caps the spur round which the stream winds, and is seen again in the road-cutting on the right bank quite 25 feet above the present stream, as one proceeds to the Artillery barracks from the station side, shewing clearly it was once continuous, and has since

\* *A. pusillus* is figured in the ‘Zoology of Persia,’ Pl. XXVII, fig. 1.